

THE UNITED STATES DEPARTMENT OF ENERGY/NATIONAL NUCLEAR SECURITY
ADMINISTRATION HAS COMPLETED A FIVE-YEAR REVIEW OF THE BUILDING 832
CANYON OPERABLE UNIT AT LAWRENCE LIVERMORE NATIONAL
LABORATORY'S SITE 300

The U.S. Department of Energy (DOE) /National Nuclear Security Administration has completed the first Five-Year Review of its environmental cleanup of the Building 832 Canyon Operable Unit at Lawrence Livermore National Laboratory's (LLNL) Site 300.

THE REVIEW PROCESS

Superfund law requires that the protectiveness of cleanup actions be evaluated every five years when contaminants remain at the site above levels that allow unrestricted access. The purpose of the Five-Year Review is to evaluate the progress of the cleanup remedy towards achieving the Site's cleanup objectives, and whether the remedy continues to be protective of human health and the environment.

The Five-Year Review report summarizes the nature and extent of contamination and describes DOE's progress in cleaning up the Building 832 Canyon area. DOE's Five-Year Review report for the Building 832 Canyon Operable Unit is now available to the public at the LLNL Environmental Repository in the Tracy Public Library, 20 East Eaton Avenue, Tracy, CA 95377 [tel. (209) 835-2221]; the LLNL Discovery Center, Greenville Road at East Gate Drive, Livermore, CA 94551, [tel. (925) 422-4599]; and online at <http://www-envirinfo.llnl.gov/>.

SITE HISTORY

LLNL's Site 300 is a U.S. DOE experimental test facility operated by Lawrence Livermore National Security, LLC. Site 300 is used for the research, development, and testing of high explosive materials. Site 300 is located in the Altamont Hills between Livermore and Tracy, California. Site 300 was placed on the National Priorities List in 1992. A Site-Wide Record of Decision signed in 2008 established cleanup remedies and cleanup standards for the Building 832 Canyon Operable Unit. Experiments involving explosive chemicals and weapon components were conducted in the buildings located in the Building 832 Canyon Operable Unit. All experimentation in the Building 832 Canyon Operable Unit ceased in the mid-1980s and the buildings are now used for storage. Contaminants such as volatile organic compounds, nitrate, perchlorate, and high explosive compound have been released to the environment from past operations.

CLEANUP OBJECTIVE

The selected remedy for the Building 832 Canyon Operable Unit includes: (1) monitoring ground water to evaluate the effectiveness of the remedy in achieving cleanup standards, and to ensure there is no impact to downgradient water-supply wells; (2) risk and hazard management to prevent onsite worker exposure to volatile organic compounds volatilizing from subsurface soil into indoor air at Building 830 and from surface water at Spring 3 until risk and hazard is mitigated through active remediation; (3) extracting and treating volatile organic compounds in soil vapor and ground water, and perchlorate, and nitrate in ground water to mitigate unacceptable VOC inhalation risk for onsite workers, prevent further impacts to ground water and offsite plume migration, and reduce contaminant concentrations in soil and ground water to

cleanup; and (4) monitored natural attenuation of nitrate in ground water. The remedy at the Building 832 Canyon Operable Unit is expected to be protective of human health and the environment upon completion (i.e., when cleanup standards are achieved) for the site's industrial land use. The cleanup standards for Building 832 Canyon Operable Unit ground water are drinking water standards. Because drinking water standards do not differentiate between industrial and residential use, the ground water cleanup remedy will be protective under any land use scenario upon completion.

FOR MORE INFORMATION:

For further information, please contact:

Claire Holtzapple, DOE Site 300 Remedial Project Manager
Livermore Site Office, P.O. Box 808, L-293, Livermore, CA 94550
(925) 422-0670 or claire.holtzapple@nnsa.doe.gov